

## NETWORK CONNECTIVITY SYSTEMS



**SIGNAMAX™**  
CONNECTIVITY SYSTEMS

065-1788  
11g Wireless AP Router



## Wireless LAN



**Wireless Access Point 802.11b/g**

**Wireless AP/Router 802.11b/g**

**Wireless PCI Card 802.11b**

**Wireless PCI Card 802.11b/g**

**Wireless PCMCIA Card 802.11b/g**

**Wireless USB Dongle 802.11b/g**

**Wireless AP/Router 802.11a/b/g**

**Wireless Access Point 802.11a/b/g**

**Wireless Outdoor Access Point  
802.11a/b/g**

**Wireless PCI Card 802.11a/b/g**

**Wireless PCMCIA Card 802.11a/b/g**

**Wireless USB Dongle 802.11a/b/g**

**Wireless Mini PCI Card 802.11a/b/g**

**Wireless AP/Router 802.11b/g/n**

**Wireless MIMO Client Adapters  
802.11b/g/n**

**Antennas for 2.45 GHz Band**

**Accessories for WiFi units**

**Antennas for 5 GHz Band**

# Wireless Access Point 802.11b/g

Signamax 802.11g Access Points are the ideal solution for any network administrator who needs to expand the capacity of the wireless network. This is especially applicable to wireless networks in high traffic areas such as airports, coffee shops, shopping centers, sporting venues, and university campus deployments. At transfer rates of up to 54 Mbps. In addition to bridging 802.11b/g wireless networks, For more secure communication, the 065-1784A supports the encryption settings up to 152-bit WEP, and advanced security of WPA, WPA2 and AES. With its web-based configuration the Access Point is easy to install, alter or activate advanced setting, or update with the latest firmware.



Model 65-1784A



Model 65-1784A

## FEATURES

- Fully Comply with IEEE 802.11b and 802.11g Standard High-Speed Data Rate
- High-speed Wireless Connection Up to 54 Mbps Data Rate
- Support 64/128/152 bit WEP and WPA/WPA2 Encryption for Advanced Transfer Security
- Easy Installation, Management, and Configuration Reset
- Act as Repeater and AP at the Same Time via WDS
- Support IP Sharing to Allow More than One Device ON-Line Simultaneously
- Built-in Firewall Provides Additional Security

## Wireless Access Point 802.11b/g

PART NO.	DESCRIPTION
065-1784A	Wireless Access Point 802.11b/g

## SPECIFICATIONS

### STANDARDS

IEEE 802.11b, IEEE 802.11g, IEEE 802.3, IEEE 802.3u, IEEE 802.3x  
 Modulation Types  
 802.11b: DQPSK, DBPSK and CCK  
 802.11g: BPSK, QPSK, 16QAM, 64QAM, OFDM  
 Operating Frequency: 2.400 – 2.497 GHz ISM band  
 Operating Channels: 11 for N. America, 14 Japan, 13 Europe (ETSI),  
 2 Spain, 4 France

### DATA RATE

802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps  
 802.11b: 11, 5.5, 2, and 1 Mbps  
 Media Access Protocol: CSMA/CA with ACK  
 Receiver Sensitivity:  
 802.11b: Typical -83 dBm for 11 Mbps @ 8% PER (Packet Error Rate)  
 Typical -89 dBm for 2 Mbps @ 8% PER (Packet Error Rate)  
 802.11g: Typical Sensitivity at Which Frame (1,000-byte PDUs)  
 Error Rate = 10%  
 -87 dBm at 6 Mbps; -86 dBm at 9 Mbps; -85 dBm at 12 Mbps;  
 -83 dBm at 18 Mbps; -80 dBm at 24 Mbps;  
 -76 dBm at 36 Mbps; -71 dBm at 48 Mbps; -66 dBm at 54 Mbps  
 Transmitter Output Power  
 802.11b: Typical 18 dBm at 11, 5.5, 2 and 1 Mbps  
 802.11g: Typical RF Output Power at each Data Rate  
 +14 – 15 dBm at 54 Mbps; +14 – 16 dBm at 48 Mbps;  
 +16 – 18 dBm at 36, 24, 18, 12, 9, and 6 Mbps

### ANTENNA

Dipole antennas with 2 dBi gain for 2.4 GHz

### INTERFACE

Power Jack, Factory Reset Button,  
 10/100M Base-T (UTP), Wireless Dipole Antenna  
 Operating Voltage: 5V DC +/- 10%  
 Power Consumption: max. 6W (TBD)  
 Dimensions (L x W x H): 139.5 x 114.5 x 29.5 mm

### LEDs

Power LED, 10/100M LED, Wireless LED

### FEATURES

Transmit Power Control  
 Control TX power level from full, 50%, 25%, 12.5%, and min.  
 Radio control: Radio on/off supported  
 Auto Channel selection: Scan channel and find a clear channel  
 DFS/TPC: Dynamic Frequency Selection and Transmit Power Control  
 Security: 64/128/152 bit WEP and WPA/WPA2 Encryption  
 Authentication Type: Open System Authentication, Shared Key  
 Authentication or both enabled

# Wireless AP/Router 802.11b/g

Signamax Wireless AP Router 065-1788, IEEE802.11b/g standard compliant, is a high quality and reliable Internet routing and security device, enables multiple users to share the Broadband Internet connection with or without wires through a Cable or DSL modem. Simply install the router, connect to Cable/DSL modem, and surf Internet without extra efforts. Acting as a 10/100 Mbps 4-Port Ethernet switch as well, the router, with all ports supporting MDI/MDIX, allows you to use CAT5 cable to uplink to other routers/switches.

The Wireless 11b/g AP Router is featured with advanced security technology, supporting WEP, WPA-PSK, WPA (Wi-Fi Protected Access) TKIP/AES, WPA2 and RADIUS. With the router, your network is armed with the highest levels of protection. The Router provides a total solution for the Small and Medium-sized Business (SMB) and the Small Office/Home Office (SOHO) markets, giving you an instant network today, and the flexibility to handle tomorrow's expansion and speed.



Model 065-1788

## Wireless AP/Router 802.11b/g

PART NO.	DESCRIPTION
065-1788	Wireless AP/Router 802.11b/g

## SPECIFICATIONS

### DATA RATE

11 Mbps (11b mode), 54 Mbps (11g mode)

### STANDARDS

IEEE 802.11b / 802.11g (Wireless),

IEEE 802.3 / 802.3u (Wired)

**Operating Radius:** Indoor: 100 m, Outdoor: 300 m

**Bridging:** IEEE 802.1x, Software bridge between wireless and wired LAN

**Routing:** Static Routing

RIP version 1 (RFC 1058) and version 2 (RFC 1723)

NAT (Network Address Translation)

NAPT (Network Address and Port Translation)

DHCP (Dynamic Host Configuration Protocol) Server/Client

### SECURITY & MANAGEMENT (FEATURE)

64/128 bits WEP Encryption and SSID

WPA/ WPA2, Clone MAC

SNMP (simple Network Management Protocol) v1, v2

Supports DDNS

Supports RADIUS Client

Configuration of NAT/NAPT

Supports Virtual Server and Virtual DMZ

Provides MAC filter, Client filter, and URL/IP filter

WAN, LAN, DMZ and AP statistics

Restore to Factory Default

System Log

UPnP, ALG and Help

WDS (only / AP)

AP (Bridge / Getway mode)

Software Upgrade through Web

Firewall

### ENVIRONMENTAL

**Interface:** LAN x 4, WAN x 1

**LED Indicators:** POWER, LINK (WLAN), ACT (WLAN), LAN x 4, WAN

**Wireless Frequency:** 2.400 – 2.4835 GHz

**Receiver Sensitivity:**

IEEE 802.11: -84 dBm (Typical),

IEEE 802.11g: -60 dBm (Typical)

**Transmit Output Power:** 11b: 19±1 dBm, 11g: 15±1 dBm

**Power:** AC 9V, 1A

**Dimension (L x W x H):** 160 x 95 x 30 mm

**Weight:** 200g

**Temperature:** 0° – 45°C (Operating), -20° – 70°C (Storing)

**Humidity:** 5-95% Non-Condensing

**Supported OS:** Windows 98SE, ME, 2000, XP, NT4.0, Mac and Linux

**Regulations:** FCC Part 15 class B, CE



Model 065-1788

## FEATURES & BENEFITS

- Maximum transfer rate up to 85 Mbps from WAN to LAN, 100 Mbps LAN to LAN and 11/54 Mbps through wireless channel enables High-speed access to ISP or corporate network
- Friendly GUI Configuration and Management software
- Supports IEEE 802.3 full duplex flow control
- Built-in DHCP server automatically assigns IP address to all workstations on your LAN
- 802.11b/802.11g provides WEP Encryption and SSID functions for security purpose
- Supports MAC filter, Client filter, URL and IP filter blocking and Hacker pattern detection
- Supports ALGs (Microsoft NetMeeting, MSN Messenger, Windows Media Player, DirectX 8.0, PPTP pass through, IPSec pass through, FTP, ICMP, SMTP, POP3, DNS, Telnet, HTTP, HTTPS, H.323, SIP, Real Audio, CuSeeMe, AOL and Games)

## Wireless PCI Card 802.11b

Signamax 065-1796 let you connect your desktop computer to a wireless network, and is suitable for small offices, home offices and places where cable can not be installed. PCI card complies with 802.11b in 2,4 GHz frequency band. Users connected will enjoy faster downloads and truly instant email communication at transfer rates of up to 11 Mbps.

For more secure communication, the 065-1796 support the encryption settings up to 64/128-bit WEP and MAC address filter. 065-1796 is compliant with PCI 2.2 standard and supports most of operating systems—Windows 98/2000/XP.



Model 065-1796

### FEATURES & BENEFITS

- Complies with IEEE 802.11b
- Compliant with PCI 2.2 Standard
- High security—WEP, MAC address filter
- Supports Windows 95/2000/XP
- Support AP, Client and Bridge mode
- Easy to install and configure

### Wireless PCI Card 802.11b

PART NO.	DESCRIPTION
065-1796	Signamax PCI card 802.11b, 11 Mbps, ext. antenna, SMA male rev.

### SPECIFICATIONS

**Standard:** IEEE802.11b compliant  
**Bus Type:** 32-bit PCI 2.2  
**Protocols:** TCP/IP  
**Modulation Technology:** DSSS  
**Data Encryption:** 64/128bit WEP encryption; TKIP (Temporal Key Integrity Protocol)  
**Frequency Band:**  
 2.412 – 2.462 GHz (US), 2.412-2.484 GHz (Japan)  
 2.412 – 2.472 GHz (Europe), 2.45-2.462 GHz (Spain)  
 2.457 – 2.472 GHz (France)  
**Channels:** 11 (US, Canada), 13 (Europe), 14 (Japan), 2 (Spain), 4 (France)  
**Data Rates & Modulation:**  
 11 Mbps: CCK, 5.5 Mbps: CCK, 2 Mbps: DQPSK, 1 Mbps: DBSK  
**Media Access Protocol:**  
 CSMA/CA (Carrier sense multiple access with collision avoidance)  
**Receive Sensitivity:**  
 11 Mbps @ -84 dBm, 5.5 Mbps @ -86 dBm, 2 Mbps @ -91 dBm,  
 1 Mbps @ -93 dBm  
**LED Indicators:** Power, Link  
**Supported OS:** Windows ME, 2000, XP, Unix-Linux

### ENVIRONMENTAL

**Transmit Output Power:** Up to 17 dBm  
**Operational Voltage:** 3.3/5V  
**Power Consumption:** Tx <350 mA / Rx <200 mA  
**Temperature:**  
 Operating: -0° to 55°C  
 Storage: -5° to 70°C  
**Humidity:**  
 Operating: 0-90% Non-Condensing  
 Storage: 0-95% Non-Condensing  
**Certifications:** FCC, CE, SAR  
**Warranty:** 2 years

### SYSTEM REQUIREMENTS

Computer with CPU PII 366MHz or better  
 128MB RAM or better  
 CD-ROM Drive  
 1 PCI slot



# Wireless PCI Card 802.11b/g

Signamax 065-1798 let you connect your desktop computer to a wireless network, and is suitable for small offices, home offices and places where cable can not be installed. PCI card complies with 802.11b/g in 2,4 GHz frequency band. Users connected will enjoy faster downloads and truly instant email communication at transfer rates of up to 54 Mbps.

It provides superior performance and interoperability within mixed mode network. For more secure communication, the 065-1798 support the encryption settings up to 128-bit WEP, WPA, WPA2 (TKIP/AES). 065-1798 is compliant with PCI 2.2 standard and supports most of operating systems—Windows 98/2000/XP/Vista, MAC OS and Linux too.

Model 065-1798



## FEATURES & BENEFITS

- Complies with IEEE 802.11b/g
- Compliant with PCI 2.2 Standard
- High security—WEP, WPA, WPA 2, 802.1x
- Supports Windows, MAC OS and Linux
- Lower power consumption
- Easy to install and configure

## Wireless PCI Card 802.11b/g

PART NO.	DESCRIPTION
065-1798	Signamax PCI card 802.11b/g, 54 Mbps, ext. antenna, SMA male rev.

## SPECIFICATIONS

**Standard:** IEEE 802.11b, IEEE 802.11g

**Bus Type:** 32-bit PCI bus

**Protocols:** TCP/IP

**Modulation Technology:**

IEEE 802.11b: DSSS

IEEE 802.11g: OFDM

**Modulation Method:**

IEEE 802.11b: DBPSK / DQPSK / CCK

IEEE 802.11g: BPSK, QPSK, 16QAM, 64QAM

**Data Rate:** IEEE 802.11b: 1, 2, 5.5, 11 Mbps

IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps

**Operation Mode:** Ad hoc, Infrastructure, Soft AP

**Transmitter Power:** 17 (±2) dBm @11b, 14 (±2) dBm @ 11g

**Receive Sensitivity:**

Operating at 11 Mbps: < -80 dBm @ 8% FER,

54 Mbps: < -68 dBm @ 8% FER

**Operating Range:** Up to 300m, depending on surrounding environment

**Antenna:** External Antenna (2 dBi)

**Power Consumption:**

Transmit: around 616 mA @ 11b, 432 mA @ 11g

Receive: around 377 mA

**Security:** 64-bit, 128-bit WEP/ WPA / WPA2 (TKIP/AES)

**LED:** Red/Green LED indicator

**Operating System:** Windows XP/2K/CE/Vista,  
MAC OS, Linux

### ENVIRONMENTAL

**Transmit Output Power:** Up to 17dBm

**Operational Voltage:** 3.3/5V

**Power Consumption:** Tx < 350 mA/Rx < 200 mA

**Operating temperature:** 0° – 55°C

**Storage temperature:** -5° – 70°C

**Humidity:** 0-90% Non-Condensing

**Certifications:** FCC, CE

**Warranty:** 2 years

### SYSTEM REQUIREMENTS

Computer with CPU PII 366 MHz or better

128 MB RAM or better

CD-ROM Drive

1 PCI slot

# Wireless PCMCIA Card 802.11b/g

Signamax 065-1791 let you connect your laptop computer to a wireless network, and is suitable for small offices, home offices and places where cable can not be installed. PCMCIA card complies with 802.11b/g in 2,4 GHz frequency band. Users connected will enjoy faster downloads and truly instant email communication at transfer rates of up to 54 Mbps.

It provides superior performance and interoperability within mixed mode network. For more secure communication, the 065-1791 support the encryption settings up to 128-bit WEP, WPA, WPA2 (TKIP/AES). 065-1791 is compliant with 32-bit Card Bus Type II standard and supports most of operating systems—Windows 98/2000/XP/Vista.



Model 065-1791

## FEATURES

- Complies with IEEE 802.11b/g
- Compliant with 32-bit Card Bus Type II
- High security—WEP, WPA, WPA 2, 802.1x
- Plug and Play
- Lower power consumption
- Easy to install and configure

## Wireless PCI Card 802.11b/g

PART NO.	DESCRIPTION
065-1791	Signamax PCMCIA card 802.11b/g, 54 Mbps

## SPECIFICATIONS

### STANDARDS:

IEEE 802.11b (up to 11 Mbps), IEEE 802.11g (up to 54 Mbps)

**Card Type:** 32-bit Cardbus Type II

**Modulation Technology:**

IEEE 802.11g: BPSK, QPSK, 16 QAM, 64 QAM, OFDM

IEEE 802.11b: DQPSK, DBPSK, DSSS, CCK

**Frequency Band:**

2,400-2,483.5 MHz ISM band (IEEE 802.11b/g)

**Antenna Type:** Integrated Printed-PCB antennas with dual diversity function

**Channels:**

Thirteen channels for European countries (IEEE 802.11b)

Thirteen channels for European countries (IEEE 802.11g)

**Data Rates & Modulation:**

1, 2, 5.5, 11 Mbps (IEEE 802.11b)

6, 9, 12, 18, 24, 36, 48, 54 Mbps (IEEE 802.11g)

**Data Security:** 64, 128-bit WEP, WPA, WPA2, 802.1x

**LED Indicators:** Power, Activity

**Supported OS:** Windows XP/2000/ME/98SE/Vista

### ENVIRONMENTAL

**Operational Voltage:** 5V -10%

**Network Architecture:**

Ad-Hoc Mode (Peer-to-Peer without Access Point)

Infrastructure Mode (Communications to wired networks via Access Points with Roaming)

**Temperature:**

Operating: 0° – 55°C

Storing: -20° – 75°C

**Humidity:**

10-90%, non-condensing (operating)

5-95%, non-condensing (non-operating)

**Certification:** FCC, CE

**Warranty:** 2 years

# Wireless USB Dongle 802.11b/g

Signamax 065-1791A let you connect your laptop computer to a wireless network, and is suitable for small offices, home offices and places where cable can not be installed. USB Dongle complies with 802.11b/g in 2,4 GHz frequency band. Users connected will enjoy faster downloads and truly instant email communication at transfer rates of up to 54 Mbps.

It provides superior performance and interoperability within mixed mode network. For more secure communication, the 065-1791A support the encryption settings up to 128-bit WEP, WPA, WPA2 (TKIP/AES). 065-1791A is compliant with USB 2.0 standard and supports most of operating systems—Windows 98/2000/XP/Vista.

## FEATURES

- Complies with IEEE 802.11b/g
- Compliant with USB 2.0
- High security—WEP, WPA, WPA 2, 802.1x
- Plug and Play
- Lower power consumption
- Easy to install and configure

## Wireless USB Dongle 802.11b/g

PART NO.	DESCRIPTION
065-1791A	Signamax USB Dongle Adapter 802.11b/g, 54 Mbps

## SPECIFICATIONS

### STANDARDS:

IEEE 802.11b (up to 11 Mbps)

IEEE 802.11g (up to 54 Mbps)

**Card Type:** USB 2.0

**Modulation Technology:**

IEEE 802.11g: BPSK, QPSK, 16 QAM, 64 QAM, OFDM

IEEE 802.11b: DQPSK, DBPSK, DSSS, CCK

**Frequency Band:**

2,400-2,483.5 MHz ISM band (IEEE 802.11b/g)

**Antenna Type:** Integrated Printed-PCB antennas

with dual diversity function

**Channels:**

Thirteen channels for European countries (IEEE 802.11b)

Thirteen channels for European countries (IEEE 802.11g)

**Data Rates & Modulation:**

1, 2, 5.5, 11 Mbps (IEEE 802.11b)

6, 9, 12, 18, 24, 36, 48, 54 Mbps (IEEE 802.11g)

**Data Security:** 64, 128-bit WEP, WPA, WPA2, 802.1x

**LED Indicators:** Power, Activity

**Supported OS:** Windows XP/2000/ME/98SE/Vista

### ENVIRONMENTAL

**Operational Voltage:** 5V -10%

**Network Architecture:**

Ad-Hoc Mode (Peer-to-Peer without Access Point)

Infrastructure Mode (Communications to wired networks via Access Points with Roaming)

**Temperature:**

Operating: 0° – 55°C

Storing: -20° – 75°C

**Humidity:**

10-90%, non-condensing (operating)

5-95%, non-condensing (non-operating)

**Certification:** FCC, CE

**Warranty:** 2 years



# Wireless AP/Router 802.11a/b/g

065-1756 Wireless 802.11a/b/g AP/Router is a complete all-in-one networking solution for homes and small/medium enterprises. With its built-in 4x 10/100 Mbps auto-sensing Ethernet switch ports, users can link multiple computers to Internet without any hassle. The built-in wireless function can let you connect wirelessly with your desktop or notebook computers from up to 300 meters away, and simultaneously in wireless A and G. The Wireless Router provides multiple levels of security: 64-bit/128-bit key WEP, WPA data encryption for high-level security. Moreover, the use of IEEE 802.1X offers an effective framework for authenticating and controlling user traffic to a protected network, as well as dynamically varying encryption keys. Proprietary wireless range extension technology expands wireless range at lower bit rate. 065-1756 is a special design for local network users to resist hackers from attacking your private network and share networking resource. Not only with the NAT as natural firewall, the build-in powerful advanced firewall proceeds SPI (Stateful Packet Inspection), stops LAN users accessing inappropriate web site, as well as setting the Internet accessing time schedule. Content filtering shields children from any inappropriateness allowing you to set levels for nudity, sex, violence, and language.



Model 065-1756

## FEATURES

- Provides High performance universal wireless network connectivity
- Ideal for multi-media data transmission with high speed wireless performance
- Enhanced security management to protect user network
- Supports VPN pass through, including IPSec and PPTP
- Supports routing ability
- Easy and fast installation and setup

## Wireless AP/Router 802.11 a/b/g

### PART NO. DESCRIPTION

065-1756	Signamax Wireless AP/Router 802.11a/b/g
----------	---

## SPECIFICATIONS

### INTERFACE

**Host Interface:** WAN: 1x10/100Base-Tx (auto MDI/MDIX sensing)  
**LAN:** 4x10/100Base-T Ethernet switch port (auto sensing)  
**LED indicator:** LED x9: Power, DMZ, 11a, 11g, LAN1-LAN4, Internet  
**Antenna:** 802.11a: 4dBi (Peak Gain), 802.11g: 2 dBi (Peak Gain)

### RADIO CHARACTERISTICS

**Frequency Band:** 802.11a:  
 US: UNI-Band 5.15 – 5.35 GHz,  
 EU: UNI-Band 5.15 – 5.35 GHz  
 UNI-Band 5.47 – 5.725 GHz, 802.11b/g: ISM band 2.4 – 2.4835 GHz  
**Modulation:** 802.11a/g: OFDM, 802.11b: CCK, DQPSK, DBPSK  
**Receive Sensitivity:** 802.11a/g: 6 Mbps – 10-5 BER @ -91 dBm,  
 9 Mbps – 10-5 BER @ -90 dBm, 12 Mbps – 10-5 BER @ -89 dBm,  
 18 Mbps – 10-5 BER @ -88 dBm, 24 Mbps – 10-5 BER @ -85 dBm,  
 36 Mbps – 10-5 BER @ -82 dBm, 48 Mbps – 10-5 BER @ -75 dBm,  
 54 Mbps – 10-5 BER @ -72 dBm, 108 Mbps – 10-5 BER @ -69 dBm  
**Transmit Power:** 802.11a: Max. 16 dBm @ 16QAM R3/4,  
 802.11g: Typ: 16 dBm @ Normal Temp Range,  
 802.11b: Typ: 18 dBm @ Normal Temp Range  
**Data Rate:**  
 802.11b: 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps, (Auto fallback);  
 802.11a/g: Auto fallback  
**Operating Range<sup>1</sup>:**  
 802.11a: Up to 50 m (Indoor)  
 802.11g: Up to 100 m (Indoor)  
**Power Supply:** Input: AC 85 – 230V, 0.35A Output: DC 5V, 2.5A

### REQUIREMENT

**Operating Systems:** Win98SE/ME/2000/XP

### ENVIRONMENTAL

**Dimension (L x W x H):** 198 x 160 x 33 mm  
**Weight:** 700 g  
**Temperature:** 0° – 40°C (Operating), -20° – 70°C (Storing)  
**Humidity:** Operating 10-85% Non-Condensing,  
 Storage 5-90% Non-Condensing

### SOFTWARE FEATURES

**Standard:** 802.3, 802.11a, 802.11b, 802.11g  
**Protocol Support:** TCP/IP, NetBEUI, IPX/SPX  
**Basics:** DHCP client/server, NAT, PPPoE Client, DNS Proxy/Relay, Dynamic DNS  
**Security:** 64/128-bit WEP encryption, WPA/802.1x (Authentication) MAC address filtering, IP Filtering, Content Filtering, DoS prevention, Time-of-Day ACL  
**Advanced:** DMZ Hosting, UPnP, VPN pass-through (IPSec/PPTP/L2TP), NTP  
**Management:** Embedded Web configuration, Web, firmware upgrade, configuration backup and restore are supported, DHCP, Static IP, PPPoE, and PPTP login support

**CERTIFICATION:** FCC class B, CE Mark

**WARRANTY:** 2 years

### PACKAGE CONTENT

Wireless 802.11a/b/g Broadband AP/Router  
 CD-ROM with User Guide, Quick Installation Guide, DC Power Adapter, RJ45 Cat. 5, UTP cable

<sup>1</sup> The transmission speed varies in the surrounding environment

# Wireless Access Point 802.11a/b/g

Signamax 065-1755 Wireless 11a/b/g Dual-Band Access Point can be accessed in all three 802.11 wireless networks. 065-1755 contains two separate wireless connectivity radio transceivers, which support all three popular wireless networking specifications. One of the two transceivers uses 2.4 GHz frequency band and supports both wireless 802.11b and 802.11g, which offers up to 11 Mbps and 108 Mbps data rate respectively. The other transceiver uses 5 GHz frequency band and supports wireless 802.11a, also up to 108 Mbps. Since two radio waves operate in different frequency bands, they can work simultaneously and cover your wireless zone with high-speed performance. In terms of security, 065-1755 offers up to 128-bit WEP Encryption, WPA and also includes MAC address filtering, which allows you to assign Internet Access to those you permit. The configuration and installation is made to be simple and fast following the web browser-based setup wizard.

## FEATURES & BENEFITS

- Provide High performance universal wireless network connectivity
- Ideal for multi-media data transmission with high speed wireless performance
- Easy and fast installation and setup
- WDS: AP, Bridge, Repeater, and AP Client
- Atheros XRTM eXtended Range technology



Model 065-1755

## Wireless Access Point 802.11a/b/g

PART NO.	DESCRIPTION
065-1755	Signamax Wireless 5 GHz Access Point/Client/Repeater 802.11a/b/g

## SPECIFICATIONS

### INTERFACE

**Ethernet LAN:** One 10/100Base-T Ethernet switch port (auto sensing)  
**LED indicator:** LED x4: Power, LAN, 11a link/Act, 11g link/Act  
**Antenna:** 802.11a: 4 dBi (Peak Gain), 802.11b/g: 2 dBi (Peak Gain)  
**Reset Button:** Reset to default setting (hold the reset button after 6 sec)

### RADIO CHARACTERISTICS

**Standard:** IEEE 802.11a 802.11b and 802.11g for WLAN;  
 802.3 for wired LAN  
**Frequency Band:** 802.11a: US: UNI-Band 5.15 – 5.35 GHz  
 EU: UNI-Band 5.15 – 5.35 GHz; UNI-Band 5.47 – 5.725 GHz  
 802.11b/g: ISM band 2.4 – 2.4835 GHz  
**Modulation:** 802.11b: 11 Mbps & 5.5 Mbps CCK;  
 2 Mbps: DQPSK; 1 Mbps: BPSK  
 802.11g and 802.11a: OFDM  
**Media Access Protocol:** CSMA/CA with ACK  
**Transmit Power:** 802.11a: Max 16dBm@16QAM R3/4  
 802.11g: Typ. 16 dBm @ Normal Temp Range  
 802.11b: Typ. 18 dBm @ Normal Temp Range  
**Receive Sensitivity:** 802.11a: 6 Mbps 10-5 BER @ -91 dBm;  
 54 Mbps 10-5BER @ -72 dBm; 108 Mbps 10-5BER @ -69 dBm  
 802.11g: 11 Mbps 10-5 BER @ -85 dBm; 54 Mbps 10-5 BER @ -72 dBm;  
 108 Mbps 10-5BER @ -69dBm  
**Data Rate:** 802.11b: 11, 5.5, 2, 1 Mbps, auto fallback  
 802.11g & 802.11a: 108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps  
**Operating Range:** 802.11b: up to 300 m (Outdoor), 35 – 60 m (Indoor)  
 802.11g: up to 50 m (Outdoor), 20 m (Indoor)  
 802.11a: up to 300 m (Open space), 100 m (Indoor)  
 \* The performance various depend on environment.

### ENVIRONMENTAL

**Dimension (L x W x H):** 195 x 160 x 27 mm  
**Weight:** 700 g  
**Temperature:** 0° – 40°C (Operating), -20° – 70°C (Storing)  
**Humidity:** 95% Non-Condensing

### SOFTWARE FEATURES

**Protocol Support:** TCP/IP, IPX, NetBEUI  
**Security:** Up to 64bit/128-bit WEP & WPA, MAC address filtering, IP Filtering, Content Filtering, DoS prevention, Time-of-Day ACL  
**Operating mode:** AP, AP Client, Repeater, P2P & P2MP Bridge  
**Management:** Built-in HTTP Server for setup and remote management via any browser

### POWER SUPPLY

**Input:** AC 85 – 230V, 0.35A  
**Output:** DC 5V, 2.5A

### CERTIFICATION

FCC class B, CE Mark

### WARRANTY

2 years

### PACKAGE CONTENT

One Wireless AP, One CD-ROM with User Guide  
 One DC Power Adapter, One Quick Installation Guide  
 One RJ45 Cat.5 UTP cable

# Wireless Outdoor Access Point 802.11a/b/g

Signamax 065-1761 Wireless 11a+g Dual-Band Outdoor Access Point w. Integrated 20dBi Outdoor Flat Antenna can be accessed in all three 802.11 wireless networks. 065-1761 contains two separate wireless connectivity radio transceivers, which support all three popular wireless networking specifications. One of the two transceivers uses 2.4 GHz frequency band and supports both wireless 802.11b and 802.11g, which offers up to 11 Mbps and 108 Mbps data rate respectively. The other transceiver uses 5 GHz frequency band and supports wireless 802.11a, also up to 108 Mbps. Since two radio waves operate in different frequency bands, they can work simultaneously and cover your wireless zone with high-speed performance. In terms of security, 065-1761 offers up to 128-bit WEP/WPA Encryption and also includes MAC address filtering, which allows you to assign Internet Access to those you permit. The configuration and installation is made to be simple and fast following the web browser-based setup wizard.



Model 065-1761



Model 065-1761

## FEATURES & BENEFITS

- Protocol Support TCP/IP, IPX, NetBEUI
- Security Up to 64bit/128-bit WEP & WPA, MAC address filtering
- MAC address filtering, IP Filtering, Content Filtering
- DoS prevention, Time-of-Day ACL
- Operating mode AP, AP Client, Repeater, P2P & P2MP Bridge
- Management Built-in HTTP Server for setup and remote management via any browser

## SPECIFICATIONS

### RADIO CHARACTERISTICS

Standard IEEE 802.11a 802.11b and 802.11g for WLAN;  
802.3 for wired LAN  
Frequency Band 802.11a: US: UNI-Band 5.15–5.35 GHz,  
EU: UNI-Band 5.15–5.35 GHz, UNI-Band 5.47–5.725 GHz  
802.11b/g: ISM band 2.4–2.4835 GHz  
Modulation 802.11b: 11 Mbps & 5.5 Mbps CCK;  
2 Mbps: DQPSK;  
1 Mbps: BPSK  
802.11g and 802.11a: OFDM  
Media Access Protocol CSMA/CA with ACK  
Transmit Power 802.11a: Max 16dBm@16QAM R3/4  
802.11g: Typ. 16 dBm @ Normal Temp Range  
802.11b: Typ. 18 dBm @ Normal Temp Range  
Receive Sensitivity 802.11a: 6 Mbps 10 – 5 BER @ -91dBm;  
54 Mbps 10–5BER @ -72 dBm; 108 Mbps 10–5BER @ -69dBm  
802.11g: 11 Mbps 10–5 BER @ -85dBm;  
54 Mbps 10–5 BER @ -72 dBm; 108 Mbps 10–5BER @ -69dBm  
Data Rate 802.11b: 11, 5.5, 2, 1 Mbps, auto fallback  
802.11g & 802.11a: 108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps

### INTERFACE

Ethernet LAN One 10/100Base-T Ethernet switch port  
(auto sensing)  
Integrated Outdoor 20 dBi Flat Antenna 5.150 – 5.875 GHz  
Interface for 2,4 GHz Antenna (SMA)  
Reset Button Reset to default setting  
(hold the reset button after 6 sec), 802.3af PoE support

### ENVIRONMENTAL

**Dimension:** 190 x 216 x 50 mm  
**Weight:** 1,800 g  
**Temperature:** -20° – 60°C (Operating), -20° – 70°C (Storing)  
**Humidity:** 95% Non-Condensing

### POWER SUPPLY

**Input Input:** AC 85 – 230V, 0.35A  
**Output Output:** DC 5V, 2.5A

**CERTIFICATION:** FCC class B, CE Mark

**WARRANTY:** 2 years

### PACKAGE CONTENT

One Wireless Outdoor AP, One CD-ROM with User Guide  
One DC Power Adapter, One Quick Installation Guide  
One RJ45 Cat.5 UTP cable

Wireless Outdoor Access Point 802.11a/b/g

PART NO.	DESCRIPTION
065-1761	Wireless 11a+g Dual-Band Outdoor Access Point w. Integrated 20dBi Outdoor Flat Antenna

# Wireless PCI Card 802.11a/b/g

Signamax 065-1750 Wireless 11a/b/g PCI Adapter offers high-speed wireless connection with a data rate up to 108 Mbps. 065-1750 supports seamless roaming from cell to cell in all types of wireless networks. You can place your desktop computers anywhere at home or in the office building without any wire limitation. The 065-1750 supports advanced security features including 64/128-bit Wired Equivalent Privacy (WEP) & WPA encryption for more secured user network environment.

The 3dBi high gain Antenna makes 065-1750 more sensitive to the wireless surrounding. Wider and longer receiving range increases your Internet access mobility and still provides the speed you need for large file download, digital video and audio transmissions.



Model 065-1750



Model 065-1750

## SPECIFICATIONS

### INTERFACE

**Host Interface:** PCI rev2.3 Interface  
**LED indicator:** Activity, Network Link  
**Antenna:** Dual Band a: 3dBi antenna / b: 1dBi

### RADIO CHARACTERISTICS

**Standard:** IEEE 802.3, 802.3u, 802.11a, 802.11b, 802.11g  
**Frequency Band:** 802.11a:  
 US: UNI-Band 5.15 – 5.35 GHz  
 EU: UNI-Band 5.15 – 5.35 GHz, UNI-Band 5.47 – 5.725 GHz  
 802.11b/g: ISM band 2.4 – 2.4835 GHz  
**Modulation:** 802.11a/g: OFDM,  
 802.11b: CCK, DQPSK, DBPSK  
**Receive Sensitivity:**  
 802.11a: -70 dBm @ 54 Mbps 10% PER  
 802.11g: -72 dBm @ 54 Mbps 10% PER  
 802.11b: -88 dBm @ 11 Mbps 10% PER  
**Transmit Power:** 802.11a: 11 – 18 dBm;  
 802.11g: 15 – 19 dBm  
 802.11b: 18 ±1 dBm  
**Data Rate:**  
 802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps per channel,  
 auto fallback;  
 802.11b: 11, 5.5, 2, 1 Mbps per channel, auto fallback;  
 802.11g: 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps  
 per channel, auto fallback  
**Operating Range:**  
 802.11a: Up to 50 m (Indoor)  
 802.11g: Up to 100 m (Indoor)

### ENVIRONMENTAL

**Dimension (L x W x H):** 147 x 120 x 20 mm  
**Weight:** 104 g  
**Security:** 802.11a: 64/128-Bit WEP, WPA  
 802.11b/g: 64/128-Bit WEP, WPA  
**Temperature:**  
 0° – 60°C (Operating), -20° – 80°C (Storing)  
**Humidity:**  
 Operating 10-85% Non-Condensing  
 Storage 5-90% Non-Condensing  
**Operating Voltage:** 3.3V ±5%

### REQUIREMENT

**Operating Systems:** Win98SE/ME/2000/XP/Vista

### CERTIFICATION

FCC, CE

### WARRANTY

2 years

### PACKAGE CONTENT

Dual-Band Wireless 802.11a/b/g PCI Adapter  
 Setup CD-ROM with User Guide, Quick Installation Guide

## FEATURES

- One adapter connects either 2.4 GHz (802.11b or 802.11g) or 5 GHz (802.11a) networks.
- Advanced security features with up to 128-bit WEP encryption and WPA
- Easy to setup

## BENEFITS

- Dual-Band wireless adapter connects your desktop PC to 802.11a, 802.11b, 802.11g wireless networks
- Protects your wireless communications with up to 128-bit encryption
- Incredible data rates up to 108 Mbps

## Wireless PCI Card 802.11a/b/g

PART NO.	DESCRIPTION
065-1750	Signamax Wireless 5 GHz PCI Card 802.11a/b/g



# Wireless PCMCIA Card 802.11a/b/g

The 065-1751 Wireless 11a/b/g CardBus Adapter offers high-speed wireless connection with a data rate up to 108 Mbps. It can provide the speed you need for large file download, digital video and audio transmissions. 065-1751 supports seamless roaming from cell to cell in all types of wireless networks. You can place your notebook anywhere at home or in the office building without any wire limitation. The 065-1751 supports advanced security features including 64/128-bit Wired Equivalent Privacy (WEP) & WPA encryption for more secured user network environment.



Model 065-1751

## Wireless PCMCIA Card 802.11a/b/g

PART NO.	DESCRIPTION
065-1751	Signamax Wireless 5 GHz PCMCIA Card 802.11a/b/g

## BENEFITS

- Dual-Band wireless adapter connects your desktop PC to 802.11a, 802.11b, 802.11g wireless networks
- Protects your wireless communications with up to 128-bit encryption
- Incredible data rates up to 108 Mbps

## FEATURES

- One adapter connects either 2.4 GHz (802.11b or 802.11g) or 5 GHz (802.11a) networks
- Advanced security features with up to 128-bit WEP encryption and WPA
- Easy to setup

## SPECIFICATIONS

### INTERFACE

**Host Interface:** CardBus Interface  
**LED indicator:** Power, Network Link  
**Antenna:** Integrated Dual Band diversity antenna

### RADIO CHARACTERISTICS

**Standard:** IEEE 802.3, 802.3u, 802.11a, 802.11b, 802.11g  
**Frequency Band:** 802.11a: US: UNI-Band 5.15 – 5.35 GHz  
 EU: UNI-Band 5.15 – 5.35 GHz, UNI-Band 5.47 – 5.725 GHz  
 802.11b/g: ISM band 2.4 – 2.4835 GHz  
**Modulation:** 802.11a/g: OFDM  
 802.11b: CCK, DQPSK, DBPSK  
**Receive Sensitivity:** 802.11a: -70dBm @54 Mbps 10% PER  
 802.11g: -72 dBm @ 54 Mbps 10% PER  
 802.11b: -88 dBm @ 11 Mbps 10% PER  
**Transmit Power:** 802.11a: 11 – 18 dBm; 802.11g: 15 – 19dBm  
 802.11b: 18 ±1dBm  
**Data Rate:** 802.11a<sup>1</sup>: 54, 48, 36, 24, 18, 12, 9, 6 Mbps per channel, auto fallback; 802.11b: 11, 5.5, 2, 1 Mbps per channel, auto fallback  
 802.11g<sup>2</sup>: 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps per channel, auto fallback  
**Operating Range<sup>2</sup>:** 802.11a: Up to 50 m (Indoor)  
 802.11g: Up to 100 m (Outdoor)

### ENVIRONMENTAL

**Dimension (L x W x H):** 120 x 54 x 8 mm  
**Weight:** 42 g  
**Security:** 802.11a: 64/128-Bit WEP, WPA  
 802.11b/g: 64/128-Bit WEP, WPA  
**Temperature:** 0° – 60°C (Operating), -20° – 80°C (Storing)  
**Humidity:**  
 Operating 10-85% Non-Condensing  
 Storage 5-90% Non-Condensing  
**Operating Voltage:** 3.3V ±5%

### REQUIREMENT

**Operating Systems:** Win98SE/ME/2000/XP/Vista

### CERTIFICATION

FCC, CE

### WARRANTY

2 years

### PACKAGE CONTENT

Dual-Band Wireless 802.11a/b/g CardBus Adapter  
 Setup CD-ROM with User Guide, Quick Installation Guide

<sup>1</sup> Support enhanced proprietary Super Mode up to 108 Mbps

<sup>2</sup> The transmission speed varies in the surrounding environment



# Wireless USB Dongle 802.11a/b/g

The 065-1752 Wireless 11a/b/g USB Dongle offers high-speed wireless connection with a data rate up to 54 Mbps. It can provides the speed you need for large file download, digital video and audio transmissions. 065-1752 supports seamless roaming from cell to cell in all types of wireless networks. You can place your desktop computers anywhere at home or in the office building without any wire limitation. The 065-1752 supports advanced security features including 64/128-bit Wired Equivalent Privacy (WEP) & WPA encryption for more secured user network environment.



## FEATURES

- One adapter connects either 2.4 GHz (802.11b or 802.11g) or 5 GHz (802.11a) networks
- Advanced security features with up to 128-bit WEP encryption and WPA
- Easy to setup

## BENEFITS

- Dual-Band wireless adapter connects your desktop PC to 802.11a, 802.11b, 802.11g wireless networks
- Protects your wireless communications with up to 128-bit encryption
- Incredible data rates up to 54 Mbps

## Wireless USB Dongle 802.11a/b/g

PART NO.	DESCRIPTION
065-1752	Signamax Wireless USB Dongle Adapter 802.11a/b/g

## SPECIFICATIONS

### INTERFACE

- Host Interface:** USB2.0
- LED indicator:** Power
- Antenna:** Integrated Dual Band diversity antenna

### RADIO CHARACTERISTICS

- Standard:** IEEE 802.3, 802.3u, 802.11a, 802.11b, 802.11g
- Frequency Band:** 802.11a: US: UNI-Band 5.15 – 5.35 GHz  
EU: UNI-Band 5.15 – 5.35 GHz. UNI-Band 5.47 – 5.725 GHz
- 802.11b/g: ISM band 2.4 – 2.4835 GHz
- Modulation:** 802.11a/g: OFDM
- 802.11b: CCK, DQPSK, DBPSK
- Receive Sensitivity:** 802.11a: -70dBm @54 Mbps 10% PER
- 802.11g: -72 dBm @ 54 Mbps 10% PER
- 802.11b: -88 dBm @ 11 Mbps 10% PER
- Transmit Power:** 802.11a: 11 – 18dBm; 802.11g: 15 – 19dBm
- 802.11b: 18 ±1dBm
- Data Rate:** 802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps per channel, auto fallback; 802.11b: 11, 5.5, 2, 1 Mbps per channel, auto fallback
- 802.11g: 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps per channel, auto fallback
- Operating Range<sup>1</sup>:** 802.11a: Up to 50 m (Indoor)
- 802.11g: Up to 100 m (Indoor)

### ENVIRONMENTAL

- Dimension:** 80 x 25 x 10 mm (L x W x H)
- Weight:** 20 g
- Security:** 802.11a: 64/128-Bit WEP, WPA
- 802.11b/g: 64/128-Bit WEP, WPA
- Temperature:** 0° – 50°C (Operating), -20° – 80°C (Storing)
- Humidity:** Operating 10-85% Non-Condensing
- Storage 5-90% Non-Condensing
- Operating Voltage:** 5V ±5%

### REQUIREMENT

- Operating Systems:** Win2000/XP/Vista, Linux

### CERTIFICATION

- FCC, CE

### WARRANTY

- 2 years

### PACKAGE CONTENT

- Dual-Band Wireless 802.11a/b/g USB Dongle
- Setup CD-ROM with User Guide, Quick Installation Guide

<sup>1</sup> The transmission speed varies in the surrounding environment

# Wireless Mini PCI Card 802.11a/b/g

The 065-1753 Wireless mini PCI card compatible with 802.11a/b/g offers high-speed wireless connection with a data rate up to 108 Mbps. It can provide the speed you need for large file download, digital video and audio transmissions. 065-1753 supports seamless roaming from cell to cell in all types of wireless networks. You can insert this card anywhere to different router boards supporting Atheros chipsets.

The 065-1753 supports advanced security features including 64/128-bit Wired Equivalent Privacy (WEP) & WPA encryption for more secured user network environment.



Model 065-1761

## Wireless Mini PCI Card 802.11a/b/g

PART NO.	DESCRIPTION
065-1753	Wireless Mini PCI Card 802.11a/g/b

### CHIPSET

Atheros AR5006XS(AR5414A)

### INTERFACE

Mini PCI Interface Type IIIA

### ENVIRONMENTAL

Dimension: 60 x 45 x 4 mm

Weight: 20 g

Security:

802.11a: 64/128-Bit WEP, WPA

802.11b/g: 64/128-Bit WEP, WPA

Temperature: 0° – 55°C (Operating), -20° – 80°C (Storing)

Humidity: Operating 10-85% Non-Condensing

Storage 5-90% Non-Condensing

Operating Voltage: 3.3V ±5%

### REQUIREMENT

System Requirements

Desktop PC containing:

- 32-bit PCI slot

- 64 MB memory or greater

- 300 MHz processor or greater

Microsoft Windows 98 Second Edition/Millennium Edition/2000/Windows XP

Operating Range:

Open Space: Up to 260 m, Indoor: 100 m

The transmission speed varies in the surrounding environment

Network Protocol: TCP/IP, IPX, NDIS4 and NDIS5, NDIS 5.1

Management Utility: Monitor Internet Access Status via UI

Supplied Driver: Windows 98SE/ME/2000/XP, Linux

### WARRANTY

2 years

### NETWORK STANDARD

IEEE 802.11a, 802.11b, 802.11g

### STANDARDS

IEEE 802.3, IEEE 802.3u, IEEE 802.11a, IEEE 802.11b,

IEEE 802.11g draft standard, Wi-Fi compliant

## SPECIFICATIONS

### RADIO CHARACTERISTICS

#### Frequency Band:

802.11a: 5.15 – 5.85 GHz (subject to local regulations)

802.11b: ISM band 2.400 – 2.484 GHz (subject to local regulations)

802.11g: ISM band 2.400 – 2.484 GHz (subject to local regulations)

#### Number of Channel

802.11a: subject to local regulations

802.11b: USA and Canada – 11, Most European

countries – 13, Japan – 14, France – 14

802.11g: USA and Canada – 13, Most European

countries – 13, Japan – 14

#### Spreading

802.11a: Orthogonal Frequency Division Multiplexing

(OFDM)

802.11b: Direct Sequence Spread Spectrum (DSSS)

802.11g: Orthogonal Frequency Division Multiplexing

(OFDM)

#### Modulation

802.11a/g: 64 QAM, 16 QAM, QPSK, BPSK

802.11b: CCK, DQPSK, DBPSK

#### Data Rate

802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps per channel,

auto fallback for extended range

802.11b: 11, 5.5, 2, 1 Mbps per channel, auto fallback

for extended range

802.11g: 108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps

per channel, auto fallback for extended range

**Antenna:** Single antenna with 1dBi antenna gain

at 2.4 GHz band and 2dBi antenna gain at 5 GHz band

(External antenna)

#### Transmitted power

802.11a: 17dBm

802.11g: 18dBm

802.11b: 19dBm

tolerance: +/-1.5dBm

#### Receive Sensitivity

802.11a/g

Nominal Temp Range:

- 6 Mbps 10-5 BER @ -90 dBm, typical

- 9 Mbps 10-5 BER @ -89 dBm, typical

- 12 Mbps 10-5 BER @ -88 dBm, typical

- 18 Mbps 10-5 BER @ -86 dBm, typical

- 24 Mbps 10-5 BER @ -82 dBm, typical

- 36 Mbps 10-5 BER @ -78 dBm, typical

- 48 Mbps 10-5 BER @ -72 dBm, typical

- 54 Mbps 10-5 BER @ -68 dBm, typical

802.11b

Typ. -88 dBm @ 11 Mbps, +/-2dBm

Typ. -91 dBm @ 5.5 Mbps

Typ. -92 dBm @ 2 Mbps

Typ. -93 dBm @ 1 Mbps

#### Power consumption (peak)

802.11a

Continue TX: 510 mA @ 3.3V

Continue RX: 250 mA @ 3.3V

802.11b

Continue TX: 380 mA @ 3.3V

Continue RX: 220 mA @ 3.3V

802.11g

Continue TX: 400 mA @ 3.3V

Continue RX: 280 mA @ 3.3V

# Wireless AP/Router 802.11b/g/n

Signamax 065-1710 complies with 802.11n draft 2.0 wireless standard in 2,4 GHz frequency band. Utilizing the advanced MIMO technology, it can support the data transmission rate of up to 300 Mbps and the coverage distance is far than IEEE 802.11b/g products. Stable wireless connection and high bandwidth enable you to enjoy the network applications without any interruption.

Users connected will enjoy faster downloads and truly triple play communication at transfer rates of up to 300 Mbps. It provides superior performance and interoperability within mixed mode network. For more secure communication, the 065-1710 support the encryption settings up to 128-bit WEP, WPA, WPA2 (TKIP/AES). 065-1710 contains 1 x WAN Port + 4 x LAN Port Switch + IEEE 802.11b/g/n AP/Router.

## Wireless AP/Router 802.11b/g/n

PART NO.	DESCRIPTION
065-1710	Signamax Wireless LAN Broadband AP/Router 802.11b/g/n

## SPECIFICATIONS

### Data Transfer Rates:

11 Mbps (11b mode), 54 Mbps (11g mode),  
300 Mbps (802.11n draft 2.0)

**Standard:** IEEE 802.11b / 802.11g, 802.11n (Wireless),  
IEEE 802.3 / 802.3u (Wired)

**Operating Radius:** Indoor: 100 m, Outdoor: 300 m

### Routing:

Static Routing  
RIP version 1 (RFC 1058) and version 2 (RFC 1723)  
NAT (Network Address Translation)  
NAPT (Network Address and Port Translation)  
DHCP (Dynamic Host Configuration Protocol) Server/Client

## SECURITY & MANAGEMENT (FEATURE)

NAT/NAPT IP Sharing  
Anti-DoS Firewall  
Virtual Server/DMZ  
Complies with 2.4GHz Draft 802.11n and backward compatible  
with IEEE 802.11b/g standards  
Supports 64/128-bit WEP Encryption and WPA-PSK, WPA2-PSK

### Security

High speed data rate – up to 300 Mbps  
Supports WMM function to meet the multi-media data bandwidth requirement  
Supports advanced MIMO technology, enhancing the throughput and coverage  
range significantly  
Supports Special Applications (Port Triggers)  
Supports DDNS (DynDNS, TZO)  
VPN Pass Through (IPSec/PPTP)  
Obtain WAN IP by PPPoE/Static IP/PPTP/DHCP  
DHCP Server  
Web User Interface (Remote Configuration)  
System Status  
Security Log  
Firmware Upgrade

## ENVIRONMENTAL

**Interface:** 1xWAN RJ-45, 4xLAN RJ-45  
**LED Indicators:** POWER, LINK (WLAN), ACT (WLAN), LAN x 4, WAN  
**Wireless Frequency:** 2.400 – 2.4835 GHz  
**Receiver Sensitivity:** IEEE 802.11b: -84 dBm (Typical),  
IEEE 802.11g/n: -60 dBm (Typical)  
**Transmit Output Power:** 11b: 19±1 dBm, 11g/n: 15±1 dBm  
**Power:** 12V DC  
**Temperature:** 0° – 40°C (Operating), -20° – 70°C (Storing)  
**Humidity:** 5-95% Non-Condensing  
**Supported OS:** Windows 98SE/ME/2000/XP, NT4.0, Mac and Linux  
**Regulations:** FCC Part 15 class B, CE  
**Warranty:** 2 years

# Wireless MIMO Client Adapters 802.11b/g/n

Signamax 065-1711/12/13 complies with 802.11n draft 2.0 wireless standard in 2,4 GHz frequency band. Utilizing the advanced MIMO technology, it can support the data transmission rate of up to 300 Mbps and the coverage distance is far than IEEE 802.11b/g products. Stable wireless connection and high bandwidth enable you to enjoy the network applications without any interruption.

Users connected will enjoy faster downloads and truly triple play communication at transfer rates of up to 300 Mbps. It provides superior performance and interoperability within mixed mode network. For more secure communication, the 065-1711/12/13 support the encryption settings up to 128-bit WEP, WPA, WPA2 (TKIP/AES). 065-1711/12/13 is compliant with 32-bit Card Bus Type II / 32-bit PCI / USB 2.0 standard and supports most of operating systems—Windows 98/2000/XP/Vista.

## FEATURES

- Complies with 802.11n draft, 802.11g and 802.11b standards
- Farther coverage, less dead spaces and higher throughput with MIMO technology
- Supports QoS-WMM, WMM-PS
- Supports 64/128-bit WEP, WPA (TKIP with IEEE 802.1x), WPA2 (AES with IEEE 802.1x) functions for high level of security
- Supports the most popular operating system: Windows 2000/XP/XP64/Vista
- Supports 32-bit Cardbus interface / 32-bit PCI / USB 2.0
- Supports WPS (WiFi Protected Setup)

## SPECIFICATIONS

### Standards:

IEEE 802.11b (up to 11 Mbps)

IEEE 802.11g (up to 54 Mbps)

IEEE 802.11n (up to 300 Mbps)

**Card Type:** 32-bit Cardbus Type II / 32-bit PCI / USB 2.0

### Frequency Band:

2,400-2,483.5 MHz ISM band (IEEE 802.11b/g/n)

**Antenna Type:** 3 x Internal antenna

### Data Rates & Modulation:

11b: 1/2/5.5/11 Mbps

11g: 6/9/12/24/36/48/54 Mbps

11n (20 MHz): MCS0-15, 32 with Half Guard Interval Support (up to 144 Mbps)

11n (40 MHz): MCS0-15, 32 with Half Guard Interval Support (up to 300 Mbps)

**Data Security:** 64, 128-bit WEP, WPA, WPA2, 802.1x

**LED Indicators:** Power, Activity

**Supported OS:** Windows XP/2000/ME/98SE/Vista

## ENVIRONMENTAL

**Operational Voltage:** 5V -10%

### Temperature:

Operating: 0° – 55°C

Storing: -20° – 75°C

### Humidity:

10-90%, non-condensing (operating)

5-95%, non-condensing (non-operating)

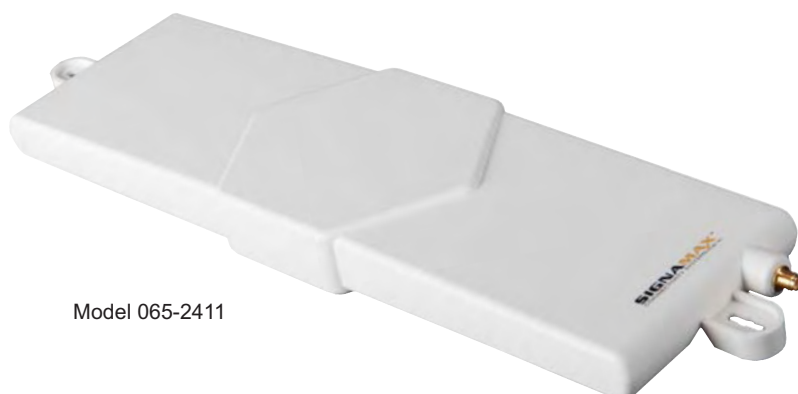
**Certifications:** FCC, CE

**Warranty:** 2 years

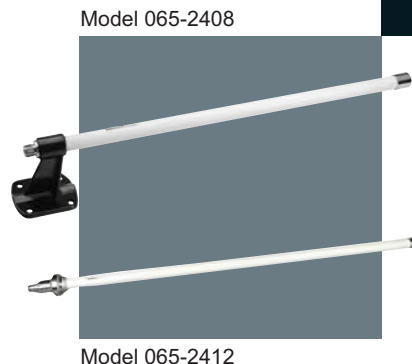
## Wireless MIMO Client Adapters 802.11b/g/n

PART NO.	DESCRIPTION
065-1711	Signamax PCMCIA card 802.11b/g/n, 300 Mbps
065-1712	Signamax PCI card 802.11b/g/n, 300 Mbps
065-1713	Signamax USB Adapter 802.11b/g/n, 300 Mbps

## Antennas for 2.45 GHz Band



Model 065-2411



Model 065-2408

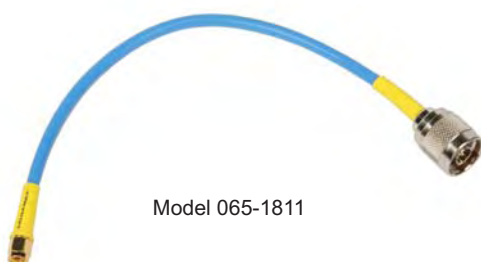
Model 065-2412

### Signamax Antennas for 2.45 GHz Band

PART NO.	DESCRIPTION	CONNECTOR
065-2408	OMNI-8.5 Omnidirectional antenna, Gain 8,5 dBi, to be used in ISM band – 2.4 GHz, vertical HPBW, V25°	N female
065-2411	UNI-11 Unidirectional antenna, Gain 11,5 dBi, to be used in ISM band – 2.4 GHz, HPBW – H80°, V30°	SMA female
065-2412	OMNI-12 Omnidirectional antenna, Gain 12 dBi, to be used in ISM band – 2.4 GHz, HPBW – V20°	N female

## Accessories for WiFi Units

The 065-18xx Signamax series coaxial cable reductions are best to be used for connecting WiFi Access Point, Bridges, Clients and/or WiFi Routers to external antennas.



Model 065-1811



Model 065-1834

### Signamax cables for connecting WiFi units to external antennas

PART NO.	DESCRIPTION	LENGTH
065-1811	Reduction from SMA female rev. (regular WiFi connector) to N male. Cable used: RG-58	0.25 m
065-1812	Reduction from SMA female rev. (regular WiFi connector) to N male. Cable used: RG-58	0.5 m
065-1813	Reduction from SMA female rev. (regular WiFi connector) to N male. Cable used: RG-58	0.75 m
065-1821	Reduction from SMA female rev. (regular WiFi connector) to N female. Cable used: RG-58	0.25 m
065-1822	Reduction from SMA female rev. (regular WiFi connector) to N female. Cable used: RG-58	0.5 m
065-1823	Reduction from SMA female rev. (regular WiFi connector) to N female. Cable used: RG-58	0.75 m
065-1832	Reduction from SMA female rev. (regular WiFi connector) to SMA male. Cable used: CNT-195	0.5 m
065-1834	Reduction from SMA female rev. (regular WiFi connector) to SMA male. Cable used: CNT-195	1 m
065-1836	Reduction from SMA female rev. (regular WiFi connector) to SMA male. Cable used: CNT-195	3 m
065-1838	Reduction from SMA female rev. (regular WiFi connector) to SMA male. Cable used: CNT-195	5 m



## Antennas for 5 GHz

The Signamax Antennas are designed by Signamax for the 5 GHz communication system. After structure optimized and being tuned carefully, it has excellent performance such as very good VSWR, high gain and big F/B Ratio etc. The strong structure and small dimension make it easy to install. Each antenna is tested by HP network analyzer strictly before delivery.



Model 065-5020



Model 065-5020

### Antennas for 5 GHz communication system

PART NO.	DESCRIPTION
<b>Antennas for 5.150 – 5.875 GHz Band</b>	
065-5020	UNI-directional antenna, Gain 20 dBi, Band 5.150 – 5.875 GHz, Vert./Hor. pol., connector N Female
<b>Antennas for 5.725 – 5.875 GHz Band</b>	
065-5808	OMNI-directional antenna, Gain 8 dBi, Band 5.725 – 5.875 GHz, Vert. pol., connector N Female
065-5812	OMNI-directional antenna, Gain 12 dBi, Band 5.725 – 5.875 GHz, Vert. pol., connector N Female
065-5818	UNI-directional antenna, Gain 18 dBi, Band 5.725 – 5.875 GHz, Vert./Hor. pol., connector N Female
065-5824	UNI-directional antenna, Gain 24 dBi, Band 5.725 – 5.875 GHz, Vert./Hor. pol., connector N Female
065-5829	UNI-directional antenna, Gain 29 dBi, Band 5.725 – 5.875 GHz, Vert./Hor. pol., connector N Female
065-5832	UNI-directional antenna, Gain 32 dBi, Band 5.725 – 5.875 GHz, Vert./Hor. pol., connector N Female
<b>Antennas for 5.400 – 5.725 GHz Band</b>	
065-5423	UNI-directional antenna, Gain 23,5 dBi, Band 5.400 – 5.725 GHz, Vert./Hor. pol., connector N Female
065-5428	UNI-directional antenna, Gain 28,5 dBi, Band 5.400 – 5.725 GHz, Vert./Hor. pol., connector N Female
065-5431	UNI-directional antenna, Gain 31,5 dBi, Band 5.400 – 5.725 GHz, Vert./Hor. pol., connector N Female

## SPECIFICATIONS

### 065-5020

Frequency Range: 5,150 – 5,875 MHz  
Gain: 20 dBi  
Vertical Beamwidth: 16°  
Horizontal Beamwidth: 16°  
VSWR:  $\leq 1.5$   
Nominal Impedance: 50  $\Omega$   
Polarization: Vertical / Horizontal  
Max Power: 100W  
Dimension: 190 x 216 x 50 mm  
Weight: 1.1 kg  
Connector: N female  
Rated Wind Velocity: 60 m/s

### 065-5808

Frequency Range: 5,725 – 5,875 MHz  
Gain: 8 dBi  
Vertical Beamwidth: 16°  
Horizontal Beamwidth: 360°  
VSWR:  $\leq 1.5$   
Nominal Impedance: 50  $\Omega$   
Polarization: Vertical  
Max Power: 100W  
Dimension:  $\geq 20$  x 350 mm  
Weight: 200 g  
Connector: N female  
Rated Wind Velocity: 60 m/s

### 065-5812

Frequency Range: 5,725 – 5,875 MHz  
Gain: 12 dBi  
Vertical Beamwidth: 7°  
Horizontal Beamwidth: 360°  
VSWR:  $\leq 1.5$   
Nominal Impedance: 50  $\Omega$   
Polarization: Vertical  
Max Power: 100W  
Dimension:  $\geq 20$  x 540 mm  
Weight: 500 g  
Connector: N female  
Rated Wind Velocity: 60 m/s

### 065-5818

Frequency Range : 5,150 – 5,350/  
5,725 – 5,875 MHz  
Gain: 18 dBi  
Horizontal Beamwidth: 40 $\pm$ 5°  
Vertical Beamwidth: 40 $\pm$ 5°  
F/B Ratio: 15 dB  
VSWR:  $\leq 1.5$   
Nominal Impedance: 50  $\Omega$   
Polarization: Vertical  
Max Power: 100W  
Connector: N female  
Dimension: 190 x 216 x 50 mm

### 065-5824

Frequency range: 5,725 – 5,875 MHz  
Gain: 24 dBi  
VSWR:  $\leq 1.5$   
Nominal Impedance: 50  $\Omega$   
Polarization: Vertical or Horizontal  
Max Power: 100W  
Connector: N Female  
Horizontal Beamwidth: 9°  
F/B ratio:  $\geq 30$  dB  
Diameter: 0.4 m  
Weight: 3 kg

### 065-5829

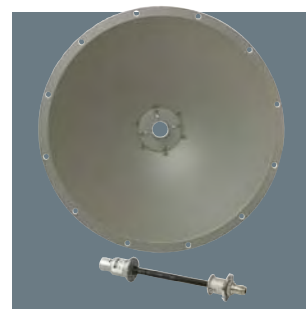
Frequency range: 5,725 – 5,875 MHz  
Gain: 29 dBi  
VSWR:  $\leq 1.5$   
Nominal Impedance: 50  $\Omega$   
Polarization: Vertical or Horizontal  
Max Power: 100W  
Connector: N Female  
Horizontal Beamwidth: 6°  
F/B ratio:  $\geq 35$  dB  
Diameter: 0.6 m  
Weight: 5 kg

### 065-5832

Frequency range: 5,725 – 5,850 MHz  
Gain: 32.5 dBi  
VSWR:  $\leq 1.5$   
Nominal Impedance: 50  $\Omega$   
Polarization: Vertical or Horizontal  
Max Power: 100W  
Connector: N Female  
Horizontal Beamwidth: 4°  
F/B ratio:  $\geq 38$  dB  
Diameter: 0.9 m  
Weight: 10 kg

### 065-5423, 065-5429, 065-5431

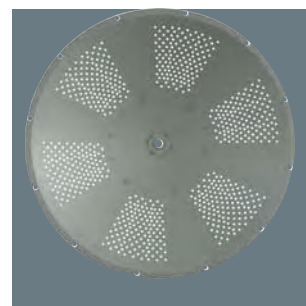
Freq. Range: 5,400 – 5,725 MHz  
Gain: 23.5, 28.5, 31.5 dBi  
Hor. Beamwidth: 9, 6, 4°  
Vert. Beamwidth: 9, 6, 4°  
F/B Ratio:  $\geq 30$ ,  $\geq 35$ ,  $\geq 38$  dB  
VSWR:  $\leq 1.65$   
Input Impedance: 50  $\Omega$   
Polarization: Vertical or Horizontal  
Max. Power: 100W  
Connector: N Female  
Diameter: 0.4, 0.6, 0.9  
Weight: 3, 5, 10 kg



Model 065-5423



Model 065-5431



Model 065-5832



Model 065-5808